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ABSTRACT

A study investigated the degree to which scores on content-based tests were influenced by non-content factors such as difficulty with reading, lack of confidence in responding independently to a test, and inexperience with modes of responding to multiple-choice questions. A test compiled from science, math, and social studies material in a primary education project was administered to children in six primary schools in the West Indies. Two treatment groups in three age categories were used. Half the students read the test and answered questions on paper. The other half had the test items read to them and responded, also on paper. Results suggest a relationship between subject area knowledge and reading. The problem appears not to be in decoding, but seems to arise with complex language structure and written forms of lexical items. Oral, receptive vocabulary is larger than written receptive vocabulary. It is suggested that students are overloaded when saturated with content knowledge and required to function in an unfamiliar medium. The problem is most apparent with the youngest students, but persists in the older students. Paper-and-pencil tests may therefore not reflect true content knowledge. A sample test is appended. (MSE)

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THE RELATIONSHIP BETWEEN READING ABILITY AND SUBJECT KNOWLEDGE AMONGST WEST INDIAN PRIMARY SCHOOL STUDENTS

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ABSTRACT

This paper describes an experiment carried out in the West Indies, to assess the degree to which scores on content-based tests are influenced by non-content factors - e.g., difficulty with reading, lack of confidence in responding independently to a test, inexperience with modes of responding to multiple-choice, etc. A test was compiled from material used in the UWI/USAID Primary Education Project, covering Social Studies, Science and Mathematics. It was given to two randomly-selected groups. For the first group, the test had to be read and answered independently by the students; for the second group, the teacher read the test aloud, and the students answered on their individual test books. Scores were markedly higher for the second group, especially amongst younger and less able participants. The individual items were analyzed to determine which contributed most, and least, to the difference in scores between the groups.

INTRODUCTION

Generally speaking, teaching in schools involves a lot of oral interaction between teacher and students, whereas testing in schools is individual, paper-and-pencil activity by students, without teacher assistance. Normally, even when there is a period of sustained individual writing, there is support and guidance from the teacher, even if it only takes the form of reassurance when a student does well. The student only rarely has to interact with a text without adult guidance or support (as happens in an examination).

This must make the examination situation stressful for students, and influence their performance on tests. In many cases, students' biggest handicap may not be lack of subject knowledge; but lack of test-taking experience and skill in written communication - independently reading and answering test papers. In some classes, but not all (especially in developing countries), this is recognized and attempts are made to ease the student's insecurities in the examination situation - normally through practice papers.

It is likely that these problems are particularly marked where a student speaks a creole or patois, and has standard English as a second dialect. This was the view taken in the evaluation of the University of the West Indies UWI/USAID Primary Education Project. Subject consultants on the project team were strongly concerned that students would not show their

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full attainment in paper-and-pencil tests. After discussion it was agreed that the tests should be given to students in the first two years (ages 7+ to 9+) as paper-and-pencil tests, but supported by the teacher reading out the text for students. This was, however, a compromise; there was a strong feeling that the problem was not restricted to students under ten years old.

This compromise left a number of unanswered questions. For example, how big is the effect on scores of difficulty with independent test-taking likely to be? Does there come a point within the primary school age range (ages 7+ years to 11+ years) at which it ceases to be important? Is the effect constant across the range of ability, so that all scores are underestimated by an equal amount, or does it bear especially hard on low-ability students? Finally, what features of individual items are likely to provoke problems; how should we phrase test items so as to minimize extraneous difficulties faced by students? After much heated discussion, an experiment was designed to assess the effect of oral presentation of a paper-and-pencil test on students' performance.

EXPERIMENTAL DESIGN

A test was compiled, covering Mathematics, Science and Social Studies, for ages 8-11. The material selected came from tests produced for evaluation of the UWI/USAID Primary Education Project. Criteria for inclusion were:

1. The item should have a linguistic element (i.e., non-verbal calculation and diagrammatic items were excluded).

2. An attempt was made to include diverse features - a balance of long and short items, simple and complex ones - and to include examples of a range of grammatical structures.

3. Items depending on a range of reference skills - map reading, chart interpretation, and so on - were included.

The resulting test had 44 items.

The test was administered in three of the territories participating in the UWI/USAID project, chosen to give diversity. The territories chosen were: **Barbados**, as an example of a relatively advanced economy, and a territory with high educational standards; **St. Kitts-Nevis**, a less developed country (ldc), but with no major educational problems; and **St. Lucia**, a territory with an above-average level of development, but where most people speak a French patois (as an example of a local circumstance that might affect the students' ability to read and write standard English).

Two schools in each territory were chosen by resident members of the project team. The criteria for selection were:

1. the schools have not been exposed to project materials;

2. one should have a standard of achievement above the territorial average, and the other below.

It was impossible to be more specific, given communications difficulties.

Within each school, as nearly as possible 150 students were chosen, fifty from each age group (7-8+, 8-9+, 9-10+). The students were divided randomly into two groups; the first group ("read") was given the test under supervision, but no assistance with any reading difficulty they might face; the second ("heard") answered the test on their copies of the booklet as it was read aloud in class.

In order to give each item as nearly as possible equal exposure, the position of the pages in the booklet was rotated. For the "heard" students, those who had the test read aloud, the pages were in a standard order within a group, but varied from group to group so that each page appeared in each position in the booklet an approximately equal number of times; for the "read" students, who had to read for themselves, the order of the pages was rotated within a group.

RESULTS

1. Distribution of Total Scores

Table 1 shows the grouped frequency distribution of total scores on the test, for the whole group (each condition) and for each year separately.

Table 1 - score distribution, whole group

Score	Whole Gp. Heard	Read
40-44	1	0
35-39	28	8
30-34	79	26
25-29	114	84
20-24	118	87
15-19	79	82
10-14	29	58
5-9	10	51
0-4	2	64
Total	460	460

The overall difference shown in table 1 between the "heard" and "read" groups is statistically highly significant - 7.09 points of raw score. In terms of dispersal, the mean score for the "heard" group was about one-third higher than for the "read" group - the average child in the "heard" group would be at the 77th. percentile in the "read" group.

2. Distribution across the Age Range

Table 2 below shows the grouped frequency distribution of total scores on the test (each condition) for each year separately.

Table 2 - score distribution by year

Score	Year 1		Year 2		Year 3	
	Heard	Read	Heard	Read	Heard	Read
40-44	0	0	1	0	0	0
35-39	0	1	11	2	17	5
30-34	8	2	26	8	45	16
25-29	24	10	45	29	45	45
20-24	47	10	42	40	29	37
15-19	49	19	22	36	8	27
10-14	16	30	10	19	3	9
5-9	7	24	2	16	1	11
0-4	2	41	0	17	0	6
Total	153	137	159	167	148	156

Table 3 gives the means and standard deviations for total score for each year within the whole group.

Table 3 - Means and SDs for Each Year - Whole Group

	Year 1		Year 2		Year 3	
	Heard	Read	Heard	Read	Heard	Read
Mean	19.79	10.82	24.77	17.71	27.79	21.69
S.D.	6.19	8.63	6.19	8.59	5.92	7.98

Table 3 shows that in terms of points of raw score the difference declines over time; in year 1, it is 8.97 points; in year 2, 7.06 points; in year 3, 6.10 points. However, since there is a similar decline in the spread of scores, the actual effect of this is not to move the two groups closer together in dispersal terms; in year 1, the average child in the "heard group is scoring at the 77th percentile of the "read group". In year 3 the average child in the "heard" group is still scoring at the 77th percentile of the "read" group.

3. Distribution across Ability Range

The total group was divided into thirds according to total score, and means and standard deviations were computed for the thirds. Table 4 below gives means and standard deviations for top, middle and bottom thirds, and for the group as a whole. This table shows that for the group as a whole, the effect of lack of the oral support given by the teacher reading the test aloud is much greater for less able students - the difference in mean score between the "heard" and "read" groups is much larger

for the bottom than the middle third of the ability range, and for the middle than the top third.

Table 4 - Means and SDs for Each Third - Whole Group

Third	Top		Middle		Bottom	
Condition	Heard	Read	Heard	Read	Heard	Read
Mean	31.72	27.36	24.30	17.79	16.24	5.84
S.D.	3.15	3.45	1.97	2.85	4.14	4.08

Table 5 below gives means and standard deviations for the total score for top, middle and bottom thirds of each year group separately. This table shows that for the youngest, and particularly the least able, students in this sample, the difficulty of coping independently with a paper-and-pencil test is an almost insuperable obstacle. In year 1, the mean score for the bottom group is almost zero. This is clearly an effect of having to cope independently with the test, because where the test is read aloud, total failure is rare. When the test is read aloud to them, twelve students, (nine in year 1) score fewer than ten marks (i.e., below chance level). Where students read independently, this kind of complete failure is much more common - 115 fail to score ten marks.

Table 5 - Means and SDs for Each Third by Year

Third		Top		Middle		Bottom	
Condition		Heard	Read	Heard	Read	Heard	Read
Year 1	Mean	26.39	20.85	19.86	9.74	13.12	1.93
	S.D.	2.92	5.59	1.41	2.89	4.09	1.66
Year 2	Mean	32.08	26.71	24.72	18.64	17.53	7.78
	S.D.	1.77	2.50	3.41	3.46	3.72	4.71
Year 3	Mean	33.82	29.69	28.38	22.94	21.16	12.42
	S.D.	2.57	2.75	1.35	2.01	4.16	5.35

4. Distribution across Territories

Table 6 below gives the means and standard deviations for each territory separately. Table 6 shows that, in this case at least, territorial variation was not as predicted. The difference between the "heard" and "read" groups is greatest in the "below average" territory; but smallest for the "patois" territory. In this study, speaking a French patois was not an obstacle to coping with a paper-and-pencil test, by comparison with students of similar ability level in territories speaking a dialect of English.

Table 6 - Means and SDs for Each Year - by Territory

	Heard	Read	Heard	Read	Heard	Read
Barb-ados	21.27 6.11	11.72 9.69	26.40 6.26	17.21 9.51	29.73 6.29	21.63 8.11
St. Kitts	18.12 6.59	6.98 5.78	22.14 5.91	15.55 8.95	26.18 6.18	20.17 7.17
St. Lucia	19.70 5.26	14.61 8.11	25.60 7.00	19.61 7.00	27.54 4.63	23.38 8.33

INVESTIGATION OF ITEM DIFFICULTY

The major practical application of this experiment was the development of item-writing guidelines for content test writers, to reduce irrelevant item difficulty (that resulting not from content but from linguistic factors). This was done by:

1. Identifying items where the subject content (as shown by the proportion of students answering the item correctly) is well known; and the item is either markedly more difficult in written mode, or not significantly different in difficulty between the two modes. The following, admittedly arbitrary, procedure was used to locate such items.

   a. Items which were answered correctly by fewer than one-third of the "heard" group were excluded, on the grounds of difficulty of content.

   b. Items showing differences up to five percentage points above or below the average difference in item facility value between the groups (16.11 percentage points) were discarded, as were borderline items (those passing either criterion by less than one percentage point).

2. The items that remained were divided into two groups: those where the difference between the proportion passing the item in written and spoken modes was large; and those where it was particularly small.

3. These two groups were subjected to detailed content analysis. This covered

   a. Evidence as the type of failure - whether students gave up (as evidenced by a higher level of non-response in the "read" group) or misunderstood the item in some interpretable way.

   b. Linguistic analysis of the items, to locate any possible sources of difficulty in the text.

The results were incorporated into item-writing guidelines.

Below are some examples of items showing a particularly large or small difference between the groups.

1. **Items where the difference between groups was large**

Item A1: (difference in difficulty between groups 23.26%)

Here are four healthy bean plants. They have just been planted and watered. They are looked after in just the same way. After two weeks which should be growing best?

(pictures of four bean plants)

a. garden soil b. crushed rock c. sandy soil d. seashore sand

This item has a long "stem"; four sentences, covering four lines of text in the original. "Should" is used, rather than the simpler "will".

Item A4: (difference in difficulty between groups 35.87%)

Mark is given four things to taste. He has to find the sour one. Which one should he pick?

a. lime b. cane c. banana d. cucumber

Again, this item has a long stem - three sentences - and uses "should". It could be simplified (e.g., "which of these fruits tastes sour?") without significant change in content.

Item B1: (difference in difficulty between groups 26.74%)

Which of these sets of weather information suggests it might rain soon?

	Cloud coverage	humidity	wind speed
A.	3/4	40%	8 km/h
B.	1/10	30%	5 km/h
C.	7/10	50%	10 km/h
D.	9/10	90%	6 km/h

This item has a novel format. When it is read, it is not immediately obvious what the task is, or how to answer. Reading it aloud would make the task clearer.

Item C1: (difference in difficulty between groups 23.69%)

Which of these materials is man-made?

a. stone b. glass c. iron d. sand

This item contains two difficult lexical items, "materials" and "man-made".

Item C2: (difference in difficulty between groups 30.87%)

These rods are all made of the same kind of plastic. If we put

the same weight on the end of each of them, which would bend most? (drawings of rods of different lengths and thicknesses)

This item is like a Science experiment; but it is very difficult to include all the necessary information in verbal form. The second sentence is very involved. It should be reduced to two or more simple declarative sentences.

Item D4: (difference in difficulty between groups 23.69%)

Which costs least money?
a. Fridge $3785 b. TV $1879 c. Stove $2978 d. Freezer $3250

This item contains only one difficult item - "least money".

Item E2: (difference in difficulty between groups 24.35%)

(diagram of pin set against ruler)
The pin is about ..... long.
a. 2 cm. b. 3 cm. c. 4 cm. d. 13 cm.

A sentence completion, requiring a structural inference.

Item G3: (difference in difficulty between groups 30.87%)

Which will your GOVERNMENT let the people do?
a. call a friend b. shoot birds
c. curse a policeman d. steal money

Structurally simple, but the number choosing C ("curse a policeman") in the "read" group suggests an error of prediction. Since cursing a policeman is invariably frowned on, this choice assumes the presence of "not".

2. Items where the difference between the groups was small

This group was much smaller; two items are worthy of note:

Item E4: (difference in difficulty between groups -1.30%)

Which costs most money?
(drawings of four slices of cake)
a. 65c. b. 90c. c. 95c. d. $1

This is an interesting contrast with item D4, which showed a high difference between the two conditions.

Item F5: (difference in difficulty between groups 2.83%)

Where will you take a sailor who has had no food for five days?
a. Hospital b. Hotel c. Home d. Church

Although this is a long sentence, meaning can be

inferred from lexical collocation (i.e., "Where ... take ... sailor ... no food ... five days?"). The alternatives are single common words; and therefore simple to understand.

ITEMS BASED ON RESOURCE MATERIAL

The presence of resource material did not in itself affect the conclusions above. However, it is difficult to draw firm conclusions, as there was considerable diversity in the types of items based on the resource material, and they showed varying results:

1. **A bar chart of numbers of sheep, goats and cows.**

This task presented minimal difficulty when the questions were straightforward:

Item F1 (difference in difficulty between groups 7.83%)

"Who has the most cows?"
a. Mr. John b. Mr. Davis c. Mr. Browne d. None of them

This is a simple comparison in a short sentence.

Item F2 (difference in difficulty between groups 6.08%)

"How many goats do the three men have together"?
a. 15 b. 17 c. 23 d. 57

This is a longer sentence; but it can be processed by lexical collocation. It involves a substantial effort of extracting information from the chart, and combining separate pieces of information.

However, an item requiring a more complex concept proved difficult:

Item F3 (difference in difficulty between groups 20.65%)

"Who has more than 9 sheep?"
a. Mr. John b. Mr. Browne c. Mr. Davis d. None of them

There are two sources of difficulty in this item - "more than", which requires reasoning; and the fact that the item requires the answer "none of them", which students often disregard.

2. **Items involving map reading.**

In the case of map reading, the difference in difficulty between the two conditions varied with the degree of complexity of the task:

Item H1 (difference in difficulty between groups 4.79%)

One NATURAL LAND FEATURE on the map is
a. farm b. road c. river d. bridge

Item H2 (difference in difficulty between groups 9.56%)

People changed the LAND between Village B and Village C by:
a. making a farm b. building a bridge
c. building a house d. building a jetty

Item H3 (difference in difficulty between groups 10.65%)

The river is flowing from
a. North to South b. East to West
c. South to North d. West to East

Item H4 (difference in difficulty between groups 22.6%)

People grow most food in
a. Village A b. Village B c. Village C d. Village D

This is particularly noticeable because the items used simple lexis, and sentence structures where the correct answer can be inferred from lexical collocation. Therefore, there is a suggestion that increase in cognitive complexity, in the absence of any increase in linguistic complexity, can lead to failure on linguistic grounds.

3. **items based on a table about countries' political systems.**

These items all showed large differences in difficulty between the two conditions. This suggests that answering questions about a table is intrinsically difficult; but oral presentation helps - perhaps by leading students through the content of the table:

Item J1: (difference in difficulty between groups 26.53%),

An independent country is:
a. Cayman Islands b. Montserrat c. Barbados d. Anguilla

> This is the item in this group showing the largest difference. It has only one major lexical item, "independent", which is well known orally.

The remaining items, about two hypothetical countries, are very difficult in both conditions, suggesting that application skills are generally weak.

4. **Items based on a time line.**

There were two items based on a time line. They showed dramatically different results:

Item G2: (difference in difficulty between groups 3.26%)

The group which came soon after the Europeans, lived in
a. China b. Venezuela c. West Africa d. England

Although the stem is long, there is little structural complexity. This item showed little effect from being read aloud. Perhaps it is often answered from received knowledge.

Item G1: (difference in difficulty between groups 24.56%)

Which group lived on the island first?
a. Syrians b. Asians c. Europeans d. Amerindians

Students in the "read" group showed a tendency to choose option (c), "Europeans". This response is reasonable (especially in Barbados) if one does not refer to the time line. The word "Amerindians" is one which students will have heard frequently in Social Studies, and may have read only seldom. In this item it is in capitals on the time line, and lower case in the options (where it is not glossed "Arawaks and Caribs"). These factors may have combined to make it a difficult lexical item.

CONCLUSIONS ABOUT PHRASING OF ITEMS

When there was a major difference in performance between modes, the most common type of failure was non-response. There was no pattern of explicable misunderstandings. However, detailed analysis suggests a number of sources of difficulty for item writers to avoid:

1. Novelty of item format (e.g. item B1) should be avoided where possible. The advantages of variety do not offset the doubts caused by novelty.

2. Short sentences are best; but sentence length is not so important as word order. Students can cope with long sentences if they can get meaning from collocation. Hence, complexities of language structure (such as inversions and comparatives, and "should" and "would") should be avoided where possible.

3. Content should be predictable. Sentences such as item G3 which do not say what the students expect should be avoided as they are a source of errors of prediction.

4. Items of the "sentence completion" type should have a simple sentence structure, which does not demand inferences about what the completion task should be.

5. Some lexical items, such as "meteorological" (B2) and "transparent" (C3) are too difficult for most students, whether spoken or read. Many students, however, have a

larger spoken than written vocabulary. Lexical items that cause much more difficulty when read than when heard include "man-made", "Amerindians", "independent", "liquid" and "eroded".

6. Resource material causes difficulty, especially where the question-chart relationship is not clear to the students, or where inductive reasoning or the collation of several pieces of information are called for. Resource material should be used circumspectly in paper-and-pencil tests.

OVERALL CONCLUSIONS

Scores obtained by paper-and-pencil testing will often seem pessimistic for students who speak and write English as a second dialect. This can lead to unduly harsh judgements being made about the students' attainment in content subjects. It can also lead curriculum developers who are not familiar with the students to assume that teachers are overly optimistic about the ability of their students - and hence to the curriculum developers losing credibility with teachers.

There is a relationship between reading ability and subject knowledge; the less able students (on content score) also suffer most difficulty with reading. This does not mean, however, that content knowledge can legitimately be tested in a reading-based test. Even with eleven-year-olds, the teacher who relies on a paper and pencil test of subject content will get a pessimistic result. However, the teacher who relies on oral testing will get an optimistic one if the answers are given orally, because questions will be answered by the brightest students.

The problem is not decoding. Most students can handle short, simple sentences, and those where meaning can be inferred from lexical collocation. There are several items where overall performance in the "read" group exceeds 60% correct. The problem arises with complex language structure, and written forms of lexical items. Students spoken, receptive vocabulary is much larger than their written, receptive vocabulary.

In effect, students are overloaded - their content knowledge is barely adequate to the task, and they are unable to cope with the added burden imposed by the unfamiliar medium, and the lack of teacher support. The most typical failure in the "read" group is not an error, but not to respond at all. In this sense, the distance between success and failure is not very great. Students either succeed, or give up. Failure therefore may not be an indicator of lack of knowledge, so much as lack of guidance and demoralization. Total failure on tests of subject content and process skills need not in fact be primarily a content problem. It cab be a language problem. On this test, very few (less than 3%) of the students scored below chance level when the test was read aloud; many students (25% of the total) did so when they had to read for themselves.

The problem is most apparent with the youngest students; but it is still important at 10+. Therefore, this finding has implications for the paper-and-pencil testing procedures for selection for secondary school operated by many Caribbean Ministries of Education. Even at 11+, it is common to find fifteen to twenty percent of students scoring zero on a selection test. This is not a fair reflection of their content knowledge. The validity of such selection procedures, where they purport to be tests of subject knowledge is questionable. It may be that the reading problem only improves the reliability of the selection tests; but until this is demonstrated, the assumption has to be that subject tests are not appropriate for ranking less able students. The "backwash effect" of such tests will also be undesirable, as it will encourage competitive students to concentrate on reading and writing to the exclusion of content knowledge.

For item writers, this study highlights the importance of writing assessment material that doesn't provoke students to irrelevant error, and how difficult this can be. The item writer who wants to write really high-quality test material has to pay attention to every single word, and the students' possible response to it.

NOTE: Revised version of paper presented at TESOL Convention (22nd, Chicago, Illinois, 8-13 March 1988)

UWI/USAID PRIMARY EDUCATION PROJECT

EXPERIMENTAL TEST

DO NOT FILL IN THIS SECTION

CODE

TERRITORY: _____

SCHOOL: _____

YEAR: _____

WAS THE TEST READ TO YOU OR NOT? _____

NUMBER (DO NOT COMPLETE THIS)

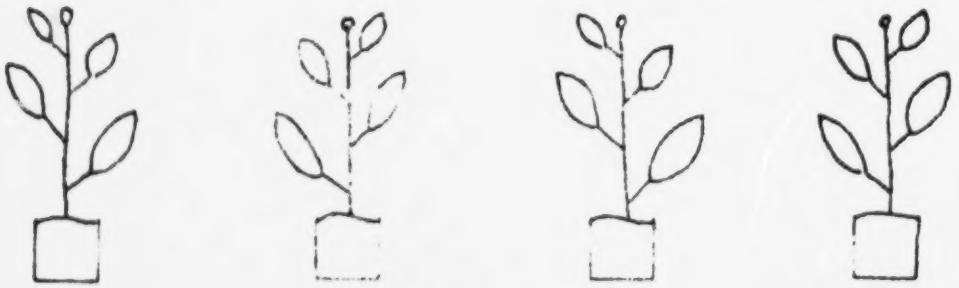
NAME _____

When the supervisor tells you, open this book and answer all the questions you can, as quickly as you can.

Don't worry if your paper is not the same as somebody else's. Answer your questions, not his.

Ask no questions at all.

1. Here are four healthy bean plants. They have just been planted and watered. They are looked after in just the same way. After two weeks which should be growing best?

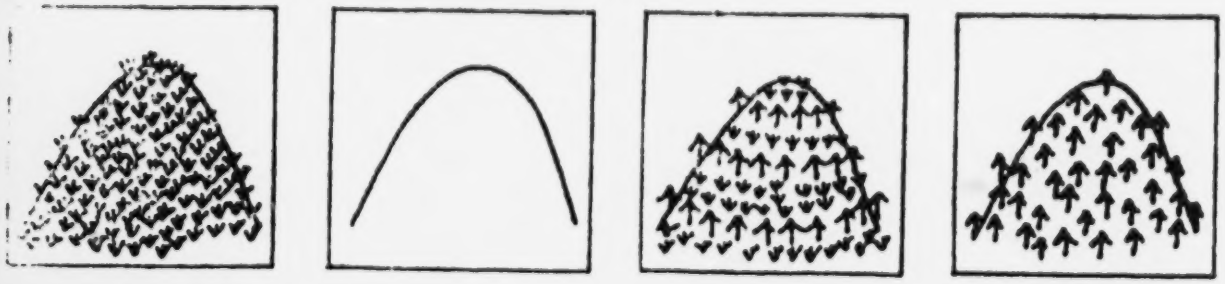


Garden Soil A | Crushed Rock B | Sandy Soil C | Seashore Sand D

2. Which of these plants should grow best?

A. A plant with light but no water.
B. A plant with water but no light.
C. A plant with no light and no water.
D. A plant with light and water.

3. Which is most likely to be eroded by water?



A Hill covered in grass.

B Bare hill.

C Hill with trees planted on the contours.

D Hill covered by trees.

4. Mark is given four things to taste. He has to find the sour one. Which one should he pick?

A. Lime B. Cane. C. Banana. D. Cucumber.

1. Which of these sets of weather information suggests that it might rain soon?

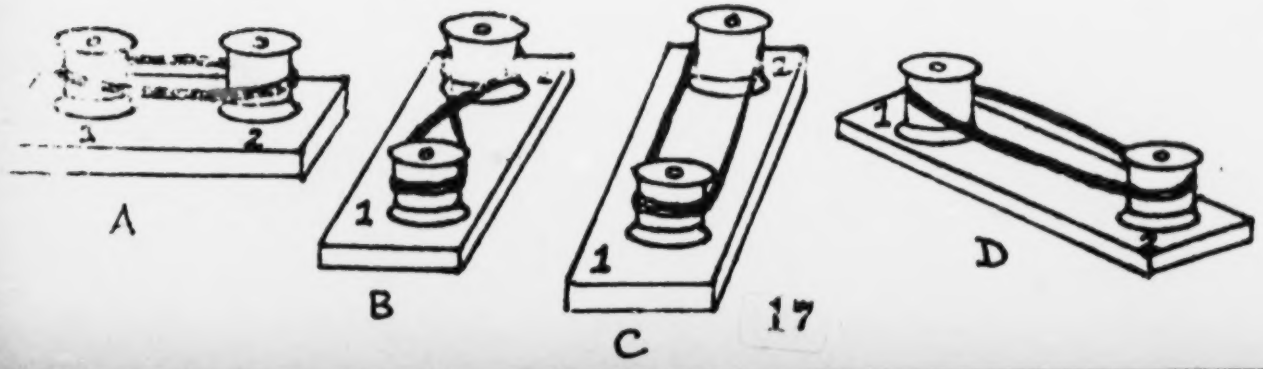
	Cloud coverage	Humidity	Wind Speed
A	$\frac{3}{4}$	40%	8 km/h
B	$\frac{1}{10}$	30%	5 km/h
C	$\frac{7}{10}$	50%	10 km/h
D	$\frac{9}{10}$	90%	6 km/h

2. Which of the following people would make most use of meteorological information?

A A fisherman B A bus driver

C A seamstress D A policeman

3. Matthew moves Wheel 1 in a clockwise direction ↻. In which diagram would Wheel 2 turn in the opposite or anticlockwise direction ↺ ?



-C-

1. Which of these materials is man-made?

A. Stone B. Glass C. Iron D. Sand

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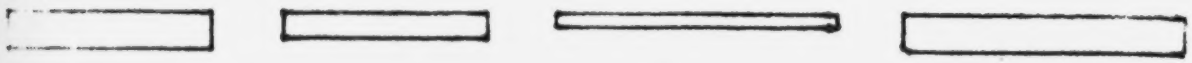
2. These rods are all made of the same kind of plastic. If we put the same weight on the end of each of them, which would bend most?



A B C D

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3. Mary needs something that is transparent Which of these could she use?

A Newspaper B Plastic Film C Aluminium Foil D Waxed Paper

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4. Which of the following things would contain a lot of aluminium?

A A road roller B A tractor C A ship D An aeroplane

---

5. Mrs Gillett is cooking a quadrimix meal. She has flying-fish, rice and carrot salad. What should she add to complete the meal?

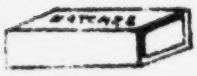
A. Green Peas B. Pumpkin C. Plantain D. Yam

---

6. To make a high pitched sound which kind of string should I use?

A. A thick, tight string
B. A thick, loose string
C. A thin, tight string
D. A thin, loose string

1



The shape of the match box is called a

A cone B cube
C cuboid D cylinder

2

Which is an odd number?

A 2 B 6 C 10 D 15

3 I have 13 marbles.
How many more do I need to make 20?

A 7 B 17 C 20 D 33

4

Which costs least money?

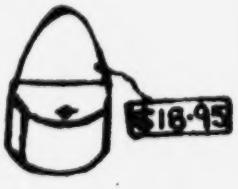
A Fridge $3785 B T.V. $1879
C Stove $2978 D Freezer $3250

5

Which weighs about 1 kilogram?

A a two-year old boy B a banana
C a pack of rice D an orange

6



Joan buys this bag.
Her change from $20·00 is

A $1·05 B $1·15 C $2·05 D $8·95

7 Which has the shape of a cylinder?

A an orange B a match box C a radio D a milk tin

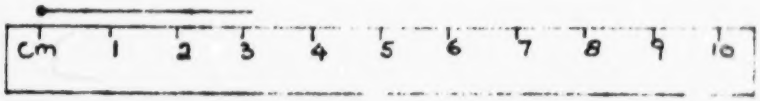
8 Which of these is a liquid?

A. This wets my skin
B. This escaped from my bicycle tyre.
C. This breaks when I hammer it
D. I can chew this.

1. Which costs most money?

A 65c B 90c C 95c D $1

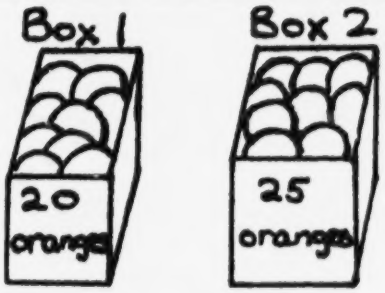
2.



The pin is about ____ long.

A 2cm B 3cm C 4cm D 13cm

3



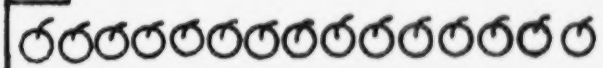
Box 2 has ____ more oranges than Box 1.

A 5 B 18 C 25 D 45

4 The are 37 boys and 56 girls in Class 1. How many children are there in Class 1?

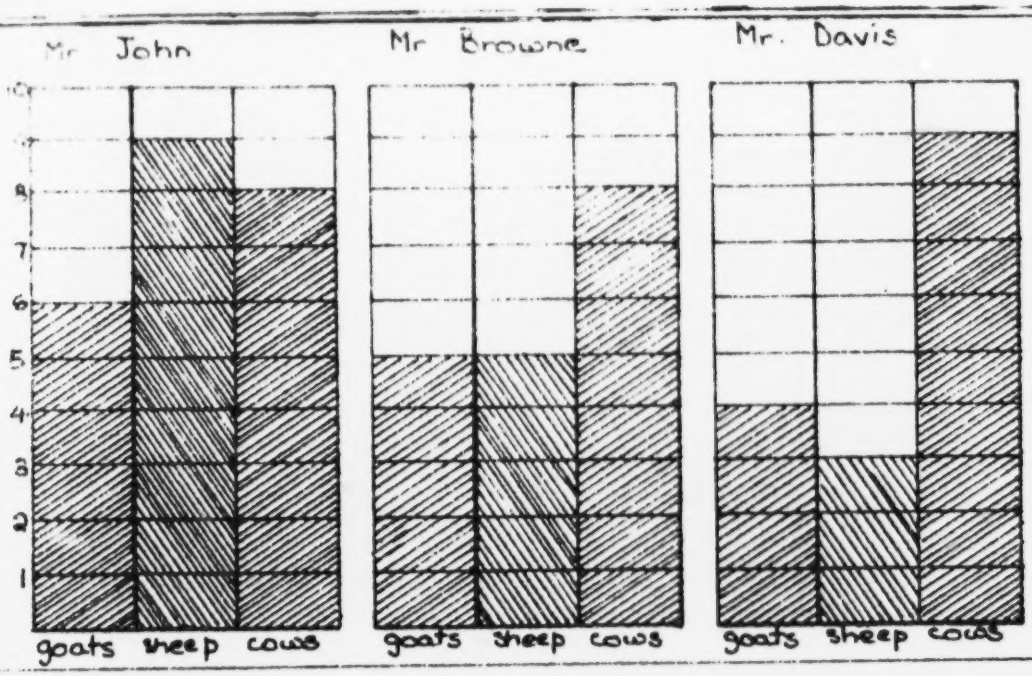
A 81 B 83 C 93 D 95

5



Share among 3 girls.
Each girl gets the same.
Each girl gets

A 4 B 5 C 12 D 45



1. Who has the most cows?

A Mr. John B Mr. Davis C Mr Browne D None of them

2. How many goats do the three men have together?

A 15 B 17 C 23 D 57

3. Who has more than 9 sheep?

A Mr. John B Mr. Browne C Mr. Davis D None of them

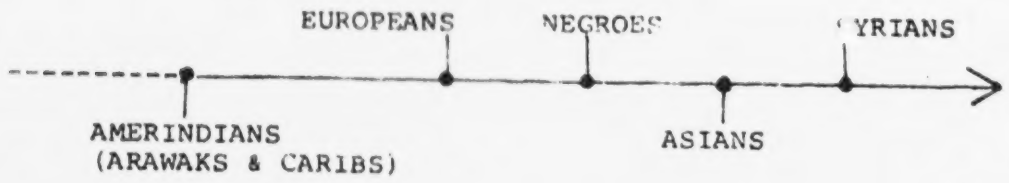
4. Which worker looks after people's health?

A. Pilot
B. Fisherman
C. Nurse
D. Teacher

5. Where will you take a sailor who had no food for five days?

A. Hospital
B. Hotel
C. Home
D. Church

PEOPLE WHO CAME TO OUR ISLAND



1. Which group lived on the island first?

A. Syrians
B. Asians
C. Europeans
D. Amerindians

2. The group which came soon after the Europeans, lived in:

A. China
B. Venezuela
C. West Africa
D. England

3. Which will your GOVERNMENT let the people do?

A. call a friend
B. shoot birds
C. curse a policeman
D. steal money

4. At GENERAL ELECTIONS people choose members for:

A. the police force
B. the Government
C. a town Council
D. a cricket team

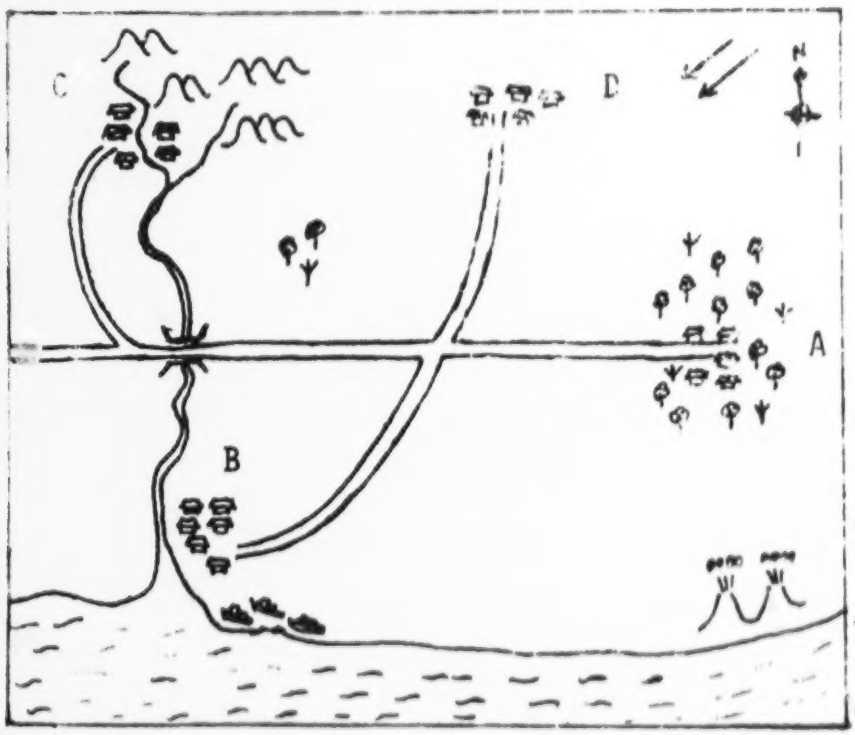
5. There is a West Indian male team of players for:

A. cricket
B. netball
C. football
D. lawn tennis

6. Many people in the Windward Islands work mainly:

A. in sugar factories
B. in the mining industry
C. on banana plantations
D. in oil refining

Land use of Imaginary Place



KEY:

direction of wind
village
bridge
sea
road
mountains
river
farms
fishing boats
volcanoes

1. One NATURAL LAND FEATURE on the map is a

A. farm
B. road
C. river
D. bridge

2. People changed the LAND between Village B and Village C by:

A. making a farm
B. building a **bridge**
C. building a house
D. building a jetty

3. The river is flowing from:

A. **North to South**
B. East to West
C. **South to North**
D. West to East

4. People grow most food in:

A. Village A
B. Village B
C. Village C
D. Village D

Information on Some Caribbean Countries

COUNTRY	POLITICAL STATUS	TITLE OF LEADER
Anguilla	Colony	Chief Minister
Barbados	Independent	Prime Minister
Montserrat	Colony	Chief Minister
Cayman Islands	Associated State	Premier
X	Republic	?
Y	?	Chief Minister
Z	Associated State	?

1. An independent country is:

   A. Cayman Islands
   B. Montserrat
   C. Barbados
   D. Anguilla

2. The leader of country Z must be a:

   A. Chief Minister
   B. Premier
   C. Prime Minister
   D. President

3. Country Y **must be**

   A. a colony
   B. an associated state
   C. an independent state
   D. a republic